

The Zarafshan is a typical river of inner Asia, having its source amongst giant mountain-ranges, and eventually drying up in a sandy desert. It follows that there is a great variety in temperature and flora, and therefore a correspondingly great variety of bird and animal life. The country that I actually worked varied in altitude from 150 ft. to 18,000 ft. above the sea-level. There is practically no wild forest in the Zarafshan Valley, and the fauna will, I think, be found to belong rather to Northern Afghanistan than to Turkestan proper.

Animal life was especially numerous in the sandy deserts and tamarisk-swamps. A very strong and sudden northward migration of birds in the spring was also of great interest.

It appears that no Englishman has ever made a systematic collection of birds anywhere in this neighbourhood, and Severtzoff's work seems to include little about the south-western corner of Turkestan. The Transcaspian Railway made travel and work in the plains very easy, but the upper Zarafshan Valley is difficult of access, and the mountain-paths are particularly difficult and even dangerous.

I also made a journey into the South-western Tian-Shan to the high plateaux of Chatir-kul and Ak-sai, north of Kashgar. On these high steppes bird-life was very scarce indeed, and mammal-life was almost entirely absent, except for marmots and one species of vole. But on the mountain-ranges which surround the plateaux there is a greater amount of life.

The difficulties of travel, the lack of fuel and of fodder, made collecting exceedingly difficult, and I found all the birds at the end of August in such a bad state of plumage that they were scarcely worth the trouble of preserving.

I am, Sirs, yours &c.,

The American College,
Beirut, Syria,
Nov. 3rd, 1908.

D. CARRUTHERS.

Birds of Bear Island and Spitzbergen.—From the ‘ Bericht ’ of the Senckenbergische Naturforschende Gesellschaft of Frankfort-on-the-Main for 1908 we learn that on January 18th, 1908, Prof. Dr. A. König, of Bonn, gave the members of the Society an account of his recent expedition to Bear Island and Spitzbergen. At Bear Island the rocks on the coast were covered with countless breeding-flocks of Guillemots (*Uria troile*, *U. ringvia*, and *U. bruennichi*) and other sea-birds. An excursion was made into the desolate interior of the island, where *Charadrius hiaticola* and *Phalaropus fulicarius* were found breeding, and Scoters (*Edemia nigra*) were seen, while feathers of *Sturnus vulgaris* and *Turdus iliacus* and *T. merula*, eaten by foxes, were discovered.

In Spitzbergen the party visited Prince Karl’s Foreland and found *Anser brachyrhynchus* and *Bernicla leucopsis* breeding there. Two nests of *Somateria spectabilis* were obtained, and a pair of *Xema sabinii* with their nest and eggs were secured. Dr. König claims to have added *Mareca penelope* and *Scolopax rusticula* to the avifauna of Spitzbergen.

Increased Fertility of the Domestic Fowl.—It would appear that in Australia the Domestic Fowl, under special treatment, can be greatly advanced in fertility. In the official report of the “Egg-laying Competition” lately held at the Agricultural College, Roseworthy, South Australia, some surprising facts on this subject are given by Mr. D. F. Lawrie, “Poultry-Expert and Lecturer.” Seventy-five pens, each of one cock and six hens, were shewn in the competition. The total number of eggs laid by all the 450 hens in one year was 80,959, making an average for each pen (of six hens) of 1079, and an average for each hen of 179. The special breeds selected for the “Egg-laying Competition” were White Leghorns, Black Orpingtons, and Silver Wyandottes, but the White Leghorns were by far the most in number. The pen which produced the greatest number (1531) in the year was of White Leghorns. These remarkable results are attributed to the “continued careful breeding of laying

strains." Mr. Lawrie is of opinion that "by a continual careful mating and subsequent care of the progeny for several generations it is possible, not only to considerably increase the average egg-production, but also, by careful selection, to evolve a strain with robust constitution, immunity from disease, and marked fecundity."

We suppose that no *Gallus bankiva* in a state of nature would lay more than from 20 to 30 eggs in the year. To increase the number of eggs to 179 is, therefore, a remarkable piece of work. But this, it appears, can only be done in Australia. In our cold climate, we are told on the best authority that anything over 100 eggs from each hen is quite exceptional.

Mr. Boyd Alexander's new African Expedition.—Mr. Boyd Alexander is now departing on another important expedition to West Africa, and will leave England very shortly. The main object in view is the establishment of the fact that the chain of islands in the Gulf of Guinea, on the West Coast of Africa, which are situated at distances varying from twenty to forty miles from the mainland, formed at one time a part of the African Continent.

Some years ago, Mr. Alexander during his exploration at Fernando Po demonstrated that the fauna of that island was closely allied to that of the mainland. As a result of his investigations on that journey, the explorer decided, when opportunity offered, upon pursuing similar investigations with regard to the remaining islands of that group. Literature regarding these islands is scanty, and there has been hitherto practically no scientific exploration of them.

Another important point is to discover whether these islands are of volcanic origin.

Mr. Alexander will not be accompanied by any other European during his travels. His assistant, José Lopez, will leave England in advance, in order to organize the caravan of the expedition at Cape Coast. There being no labour available on the islands themselves, Mr. Alexander will